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(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) EP 1 014 640 A3

(12) EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
03.07.2002 Bulletin 2002/27

(43) Date of publication A2:
28.06.2000 Bulletin 2000/26

(21) Application number: 99307793.2

(22) Date of filing: 04.10.1999

(51) Int Cl.7: H04L 27/26, H04B 3/54,
H04H 1/04

(84) Designated Contracting States:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE
Designated Extension States:
AL LT LV MK RO SI

(30) Priority: 22.12.1998 GB 9828373

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(54) Multicarrier transmission on power lines

(57)   An Orthogonal Frequency Division Multiplexed (OFDM) communications system comprising a communication station. The communications station includes a an OFDM transmitter comprising an encoder for encoding digital information, a transmission means for transmitting said information and a sub-band allocation means arranged to allocate sub-bands by selecting from a set of pre-determined parameters.
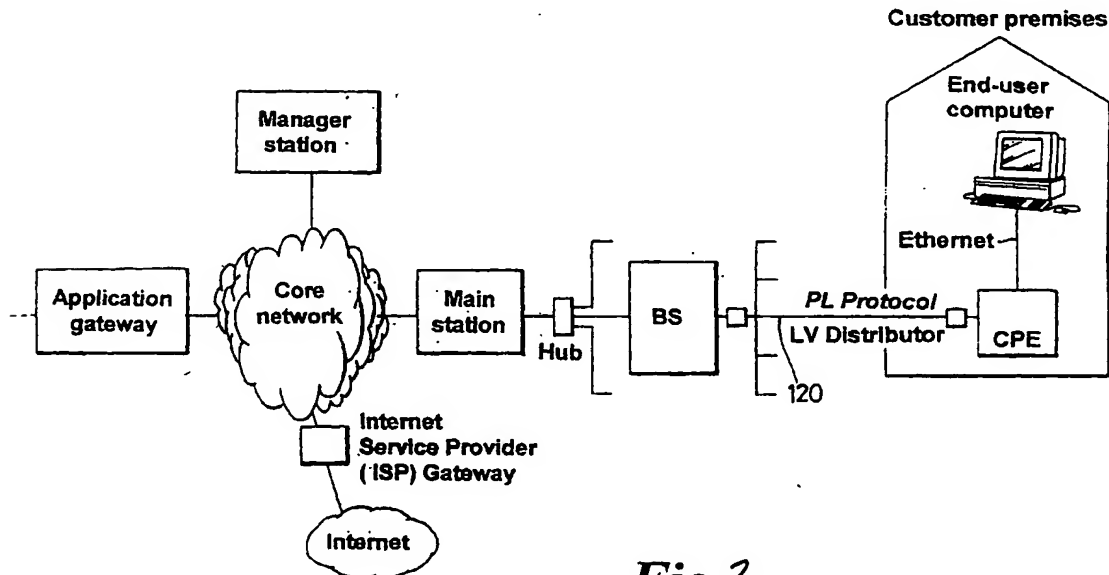
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Fig 3

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EUROPEAN SEARCH REPORT

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	PATENT ABSTRACTS OF JAPAN vol. 1996, no. 02, 29 February 1996 (1996-02-29) & JP 07 273741 A (TOSHIBA), 20 October 1995 (1995-10-20) * abstract * ---	1-7, 10-12	H04L27/26 H04B3/54 H04H1/04
X	EP 0 762 701 A (ADVANCED DIGITAL TELEVISION BROADCASING LABORATORY) 12 March 1997 (1997-03-12) * figure 8 * ---	1-7, 10-12	
X,P	HARA, BUDSABATHON: "Spread spectrum-based subcarrier recovery method for multi-carrier code division multiplexing system" EUROPEAN TRANSACTIONS ON TELECOMMUNICATIONS, vol. 10, no. 4, July 1999 (1999-07), pages 369-376, XP000866689 Milan, IT ISSN: 1124-318X * figure 3 * ---	1-7, 10-12	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7) H04L H04B
X,P	EP 0 939 527 A (SONY) 1 September 1999 (1999-09-01) * abstract; figure 4 * -----	1-7, 10-12	

~~The present search report has been drawn up for all claims~~

Place of search	Date of completion of the search	Examiner
THE HAGUE	19 February 2002	SCRIVEN P.

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Office

CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

☒ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

1-7,10-12

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**LACK OF UNITY OF INVENTION
SHEET B**

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims: 1-7, 10-12

    Inclusion of symbols with larger than normal guard intervals

2. Claims: 8, 9, 13-16

    Sub-band allocation by choosing between predetermined sets of parameters

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**
EP 99 30 7793

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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19-02-2002

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82